



Naval Information Warfare Center Atlantic Fleet C4I And Readiness Department

Tidewater Association of Service Contractors

Naval Information Warfare Center

Atlantic Industry Day

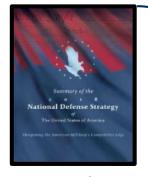
16 June 2021

Mr. Travis Tillman
Deputy Department Head (700s)

Department Division Heads Integrated Project Team Leads



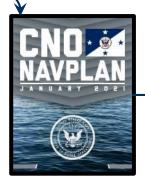
Executing National and Naval Strategies



National Defense Strategy



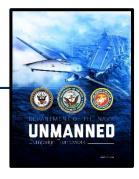
"Advantage at Sea" Tri-Service Maritime Strategy



CNO NAVPLAN



38th Commandant's Planning Guidance



DON Unmanned Campaign Framework

Partners:

- Match and deliver the Navy's demand for new technologies and equipment.
- Ensure the growth and health of technical knowledge and skills.
- Improve planning and communication. Keep lines of communication open, deliver on time.

NIWC Atlantic's Execution Plan Aligns to NAVWAR's Strategic Vision to execute National and Naval strategies



The Solutions Provider for Mission Critical Information Warfare

▼ Fleet C4I and Readiness Department

FY20: 1,567 FTEs, 150 Programs/Projects

- Engineer (design, develop and test) new C4ISR capabilities that give our Fleet an advantage over adversaries.
- Integrate C4ISR systems into the U.S. Navy's most advanced ships, submarines and shore platforms.
- Install C2, intel, communications, networks and applications for the Fleet.
- Support Fleet C4ISR systems to maintain operational availability and complete lifecycle engineering.





Research & Development, Design, **Engineering** and ISEA

FLEET C4I & READINESS DEPARTMENT **Greg Lancaster**

<u>#</u> ••••

Design, Integration, **Production and Sustainment**

Deputy 100s Greg Lancaster (A)

Deputy 700s Travis Tillman

Surface Ship

Integration

Div.

(PMW 750/760)

Mark Held

Surface New

Construction

Large Deck

Construction

Interior

Comms

New

Battle Space Awareness Div. (PMW 120) John Thompson
Afloat Signals Exploitation

Distributed Common Ground System-Navy (DCGS-N) Integrated Undersea Surveillance Systems (IUSS)

IA & Navy Cyber Security Div. (PMW 130) Jeff Sweeney

Navy Cyber Network Security Crypto and Key Management Multi-Level Security Engineering (MLSE)

Navy Afloat Network & C2 Apps Div. (PMW 150 & 160) Bob Rozar

Tactical Networks SW Support **CANES** Engineering **TACNET** Deployment Naval C2

Navy Afloat Transport & Navigation Div. (PMW 170) Robert James

Afloat Transport Systems SW Defined Radio Position. Navigation &

Timina (PNT)Engr.

PNT ISEA Radio ommunications

Foreign Military Sales Air Integration/USCG **Div.** (MW 740) Martina Jackson

NAVA R FMS TacMobile

C4I FNS USCG

Submarine Integration Div. (PMW 770)

Dave Bednarczyk Submarine CWITTs & SWFTS Modernization

Afloat Submarine C41

Shore Submarine C41

Submarine Software and Tools Development

Shore C4I Integration Div. (PMW 790)

Mark Luther

Naval Messaging

Tactical Shore Systems

Unified Capabilities Voice Solutions

Secure Voice Solutions

Multi Media

Deliver Right on Time and on Cost (C/S/P)

6.2 Competency Manager George Spellman, Deputy – Ray Chappel				
62700 –				
PMW /				
750/760/770				
62A00 -				
PMW 170				

Fleet Installations and Response Division

Len Little

Fleet Support Office (FSO) Performance Based

Logistics Office (PBLO)

Surface Modernization Force Level Depot Submarine

Modernization C4I

Shore Modernization

Surface Modernization

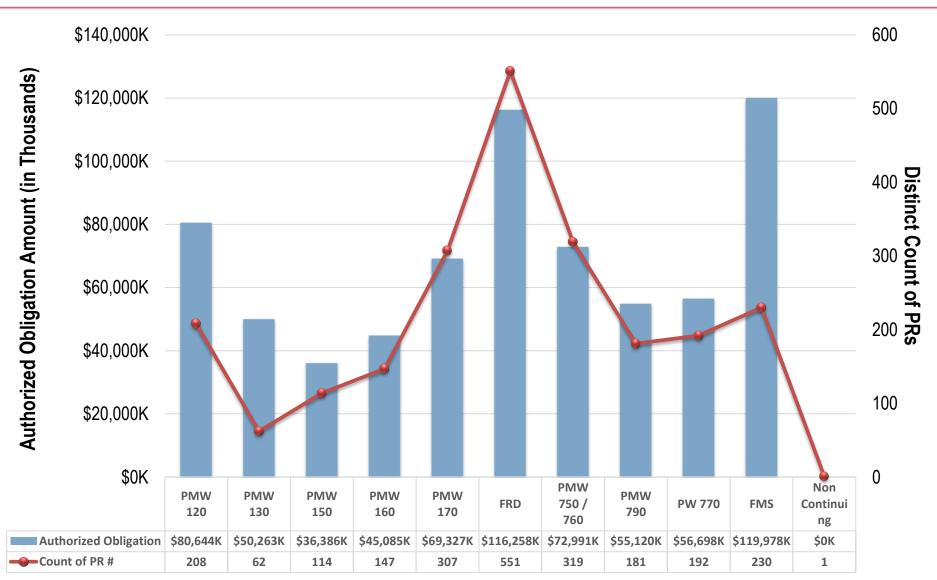
Unit Level



Field and Sustain C4I **Capabilities**



FY20 C4I Authorized Obligations and PR Count by Division

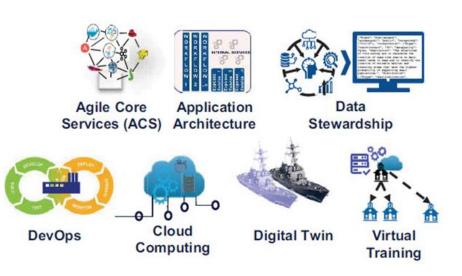




Fleet is the Priority

- ▼ COVID-19 Impact Distance Support
- ▼ No seams single Department manages all work executed within PEO C4I
- Cybersecurity is not in the trade space –
 Focus on the Fleet/Waterfront Cannot
 deliver capability that isn't cyber secure
- Capability must be designed to be modular, rapidly upgradable and standards-based – Align to C4I Information Warfare Digital Execution Plan
 - Agile Core Services
 - Development, Security and Operations (DevSecOps)
 - Cloud Computing
 - Digital Twin
 - Virtual Training

- ▼ Increase understanding of system functionality to mission capability
- ▼ Implement Digital Engineering practices with MBSE and Agile development
- ▼ Rapidly assess, integrate and deliver science and technology innovations to maintain naval advantage





Adapting to the COVID-19 Environment

NIWC Atlantic implemented maximum telework early March 2020

- Ongoing telework, continuing uninterrupted support
- Hands on deck for mission essential/critical work

Mission Essential functions

- Engineering lab integration and production
- Capability delivery and sustainment

▼ Future State

- Likely that more employees will be on expanded telework moving forward
- Potential to relieve ongoing physical space restrictions
- Potential reduction in cost to taxpayer
- How will future DoD budgets be impacted?

▼ TW Imperatives

- Employee Support
- Network Infrastructure
- Apps to enable remote work execution (MS Teams)

How is Industry responding and managing bringing staff back?



On the Horizon — Next Technologies Needed

- ▼ AI/ML capabilities: Autonomous system operation, System Troubleshooting, Predictive maintenance
- Autonomous
 - Autonomous vessels to offload risk from manned vessels
 - Platforms capable of weeks-long deployments and transoceanic transits and operate aggregated with Carrier Strike Groups (CSGs), Amphibious Ready Groups (ARGs), Surface Action Groups (SAGs), and individual manned combatants.
 - Reconfigurable mission capability
 - USV Command and Control (C2)
- ▼ Resilient Communications: Reduced or denied environments
- Model Based Systems Engineering (MBSE)
- ▼ DevSecOps:
 - Continuous Integration/Continuous Delivery (CI/CD) pipeline and environments
 - Automated Patching/IA compliance (push technology)
- Edge computing: Data processing onboard
 - Enables analysis onboard with transmission of only critical information
- ▼ 5G Capabilities
 - Increased bandwidth, improved security, IOTs



Powering Forward — Fleet C4I Thrust Areas



Thrust Area 1: Cybersecurity

Goal: Become a cybersecurity center of excellence by ingraining cybersecurity practices in all of our engineering efforts.

Initiatives: Improve understanding of current guidance through training, document and share current cyber tasking across the Department and improve vulnerability and patch management for lab systems and program baselines.

Technology Focus Area Alignment: Cybersecurity; Assured Communications



Thrust Area 2: Innovative Culture

Goal: Increase the number of IPTs creating their own future curve by pursuing improvement opportunities – new warfighter technical solutions, workforce training and lab improvements.

Initiatives: Network and Data Center Intelligent Assistant (CANES Engineering IPT); Examination of RF Propagation Commonality Strategies using Radiating Coaxial Cables (Interior Comms IPT); Orchestration

Architecture for Military RF Communications Systems (SDRS IPT); Remote Testing at the NIEF (CANES Deployment IPT); Tactical, Deployable MUOS (SDRS IPT); Resilient Communications Workshop (SDRS IPT); MBSE to MBT/RPA (Naval C2 IPT)

Technology Focus Area Alignment: Assured Communications, Artificial Intelligence, Model Based Systems Engineering



Thrust Area 3: High Velocity Learning

Goal: Create technical transparency across our IPTs and improve awareness of how system capabilities are used by the warfighter to support missions.

Initiatives: Quarterly IPT Tri-charts, monthly Thrust Area meetings, Mission Competency development leadership and support.



Strategically Aligning and Posturing to Support the Deployed Navy

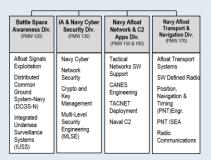
- ▼ Increasing our strategic partnership presence with SEA21 to more effectively integrate maintenance strategies, modernization plans, and technical and logistic efforts – civilian representative in D.C. and civilian/military officer at MARMC
- ▼ Increasing our speed to capability by forward deploying Capability
 - Based In-Service Engineering Activity (CB-ISEA) personnel (3x) with sponsorship by CNRMC. Streamlining Fleet Support Office touch points through CB-ISEA for government and contractor resources
- Deploying project teams for installation efforts utilizing system subject matter efforts for both software loading and SOVTs
- ▼ Maintaining regional shore installation managers in Bahrain and Naples
- ▼ Increasing Rota military presence utilizing Active Duty for Special Work (ADSW) assignments





Greg Lancaster, Deputy 100s (A) Fleet C4I and Readiness Divisions (100s)

Research & Development, Design, Engr. and ISEA





▼ Battlespace Awareness Division

 Delivers intelligence and IO products and services to Warfighters, with primary customer PMW 120 (ISR/IO). Provides the ISR/IO Capability-Based In-Service Engineering Activity (CB-ISEA) services.

▼ Information Assurance and Navy Cybersecurity Division

 Delivers cybersecurity protection of DoD IT and telecom systems with cryptographic, network and host-based security products that ensure strong authentication, data integrity, confidentiality, non-repudiation and availability of network information.

▼ Navy Afloat Network and Command & Control Apps Div.

Rapidly deliver integrated wide area, local networking and foundation computing systems products and services to Warfighters. Delivers operational and tactical command and control capabilities by integrating real-time and near real-time representations of tactical situations, providing targeting support and chemical-biological warnings. Major systems include CANES, ADNS, ISNS, CENTRIXS, CES, Afloat Readiness Reporting System, Global Theater Security Cooperation Management Information System, Global C2 System – Maritime, Global C2 System – Joint, theatre Battlefield Management Command System, Joint Automated Deep Operations Coordination System, Air Defense Systems Integrator, Link-11, Link Monitoring Management Tool and Multi-Data Link Management System.

▼ Navy Afloat Transport and Navigation Division

Provides engineering integration and lifecycle support to Navy Afloat Transport Systems. Integrate, deliver and support interoperable communications, enabling seamless Fleet operations. Provides improvements to GPS receivers and antennas and non-GPS sensors and systems. Integrates, tests and evaluates, sustains and supports software-defined radio communications solutions for the Warfighter.



Battlespace Awareness Division (PMW 120) Overview

▼ What We Do

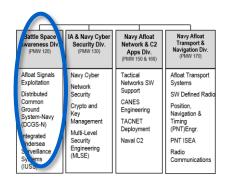
 Deliver intelligence and information operations data, products and services that provide Information Warfare solutions for the Fleet.

▼ Major Systems

- PMW-120
 - Distributed Common Ground System Navy (DCGS-N),
 - Integrated Imagery & Intelligence (I3) Project IMINT
 - Ship's Signal Exploitation Equipment (SSEE)
 - Cryptologic Carry-On Program (CCOP)
 - Automated Identification System (AIS)
 - Joint Tactical Terminal Maritime (JTT-M)
 - AN/URC-148 (V)
- PMS-485
 - Integrated Undersea Surveillance Systems (IUSS)

▼ Primary Customers

- PEO C4I PMW 120 Battlespace Awareness and Information Operations
- Fleet Readiness Directorate (FRD)
- NAVSEA & PEOs
- PMS 485 Maritime Surveillance Systems



Division Head: John Thompson

FY20 TOA: \$112,359,900



Support includes ISR/IO systems, engineering services and support to the Fleet.



IA & Navy Cyber Security Division (PMW 130) Overview

▼ What We Do

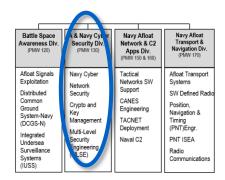
 Rapidly deliver cybersecurity products and services to ensure continued protection of Navy and joint information, telecommunications and information systems.

▼ Major Systems

- Computer Network Defense (CND)
- Serial Crypto
- Key Management Infrastructure (KMI)
- Public Key Infrastructure (PKI)

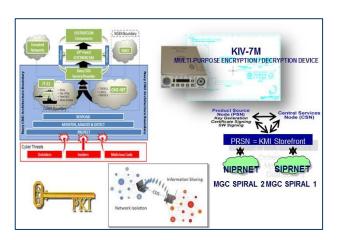
▼ Primary Customers

- PEO C4I PMW 130
- Fleet Readiness Directorate (FRD)
- Fleet Cyber Command (FCC) / Tenth Fleet (C10F)
- National Security Agency (NSA)
- United States Cyber Command (USCC)



Division Head: Jeff Sweeney

FY20 TOA: \$92,194,200



Support includes products and services to ensure strong authentication, data integrity, confidentiality, non-repudiation and availability of network resources and information.



IA & Navy Cyber Security Division (PMW 130) **Future Opportunities & Needs**

▼ Future Opportunities/Growth

Computer Network Defense

- Future Contracts
 - RDT&E, Production Engineering, Integration, Sustainment, and Logistics Services (SEAPORT/Fall 2021)
- Lab Automation
- Model Based Systems Engineering (MBSE)
- Sustainment, A&A, installs, distance support
- Artificial Intelligence and Data Analytics in Intrusion Prevention and Detection Systems

Crypto & Key Management

- Future Contracts
 - Crypto and Key Management ISEA Support (SEAPORT/Summer 2022)
- Identity Credential Access Management (ICAM) Architecture expertise
- Over the Net Keying (OTNK) expertise
- Certificate and Credential Management expertise
- Crypto Modernization expertise
- Sustainment, A&A, installs, distance support

▼ Where Industry can Help

- Match and deliver the Navy's demand for new technologies and equipment.
- Ensure the growth and health of technical knowledge and skills.
- Improve planning and communication.
 Keep lines of communication open, deliver on time.



Navy Afloat Network and Command & Control Applications Div. (PMW 150 & 160) **Overview**

What We Do

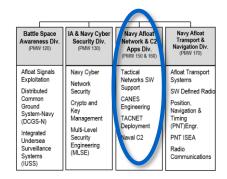
 Rapidly deliver integrated wide area, local networking and foundation computing systems products and services to naval warfighters. Deliver operational and tactical command and control capabilities by integrating realtime and near real-time representations of tactical situations, providing targeting support and chemical-biological warnings

▼ Major Systems

- Consolidated Afloat Network Enterprise Systems (CANES)
- Automated Digital Network System (ADNS)
- Integrated Shipboard Network Systems (ISNS)
- Combined Enterprise Regional Information Exchange System (CENTRIXS)
- Core Enterprise Services (CES)
- Afloat Readiness Reporting System
- Global Theater Security Cooperation Management Information System,
- Global C2 System Maritime and Global C2 System Joint
- Theatre Battlefield Management Command System
- Joint Automated Deep Operations Coordination System
- Air Defense Systems Integrator
- Link-11
- Link Monitoring Management Tool
- Multi-Data Link Management System

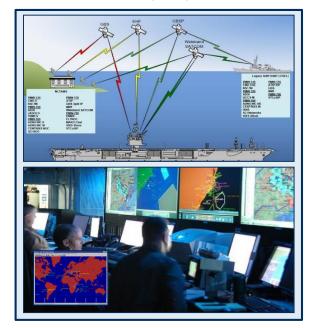
▼ Primary Customers

PEO C4I PMW 160 and Fleet Readiness Directorate (FRD)



Division Head: Bob Rozar

FY20 TOA: \$60,399,200





Navy Afloat Networks & C2 Apps. Div. (PMW 150 & 160) **Future Opportunities & Needs**

▼ Future Opportunities/Growth

- DevSecOps
- MBSE
- Automation, Integration, Installation, and Sustainment of COTS
- Proactive Sustainment
- Cybersecurity Compliance to include Risk Management Framework (RMF)
- Software Defined Networking and Software Networks
- Systems Management

▼ Where Industry can Help

- Robust, secure cloud environments to support DevSecOps and a distributed workforce
- Professionals



Navy Afloat Transport and Navigation Division (PMW 170) Overview

▼ What We Do

 Rapidly deliver assured, resilient communications and Position, Navigation and Timing (PNT) products and services, to enable information warfare capabilities for maritime. Provide Subject Matter Experts (SMEs), test and acquisition support for waveforms being developed for use within the battlefield.

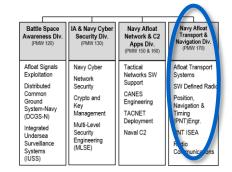
▼ Major Systems

- Navy Multiband Terminal (NMT)
- Global Broadcast System (GBS)
- Commercial Broadband Satellite Program (CBSP)
- Digital Modular Radio (DMR)
- Battle Force Tactical Network (BFTN)
- GPS-based Positioning, Navigation and Timing Service (GPNTS)

▼ Primary Customers

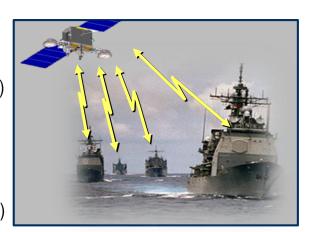
- PEO C4I PMW 170
- Fleet Readiness Directorate
- PEO C3T
- PEO Missiles and Space
- PEO IWS 6
- PEO SUBS

- Inertial Navigation Systems (INS)
- Alternatives to GPS in a Denied Environment
- Network Tactical Common Data Link (NTCDL)
- Next Generation Tactical Communications
- Joint Tactical Networking Center (JTNC)
 Joint Communications Marketplace
- PEO Space
- JTNC
- ONR (Inter-NIWC Teaming)
- SOCOM PEO-C4 (Inter-NIWC Teaming)



Division Head: Robert James

FY20 TOA: \$130,823,300



Support includes MILSATCOM and COMSATCOM engineering services and support to the Fleet.



Navy Afloat Transport and Navigation Division (PMW 170) **Future Opportunities & Needs**

▼ Future Opportunities/Growth

- Radio Communications
 - UHF Shore Site upgrades
 - Modernizing HF/VHF/UHF Surface/Subsurface
 - Improved Assured Communications
- Satellite Communications
 - Continued shore modem installations
 - Future Modem development/testing/integrations
- Software Defined Radio Systems
 - Assured Communications
 - Orchestrated Communications and Automation
 - Electronic Warfare
 - Naval Operational Architecture support

PNT

- Navigation Collaboration and Systems of Systems
- Model-Based System Engineering
- Virtualization Lab Efforts

▼ Where Industry can Help

- Match and deliver the Navy's demand for new technologies and equipment.
- Ensure the growth and health of technical knowledge and skills.
- Improve planning and communication. Keep lines of communication open, deliver on time.



Travis Tillman, Deputy 700s Fleet C4I and Readiness Divisions (700s)

Design, Integration, Production and Sustainment

Foreign Military Sales/Air Integration/USCG Div. (PMW 740) Martina Jackson	Surface Ship Integration Div. (PMW 750/760) Mark Held	Submarine Integration Div. (PMW 770) Dave Bednarczyk	Shore C4I Integration Div. (PMW 790) Mark Luther
NAVAIR FMS TacMobile C4I FMS USCG	Surface New Construction Large Deck New Construction Interior Comms	Submarine CWITTs & SWFTS Modernization Afloat Submarine C4I Shore Submarine C4I Submarine Software and Tools	Naval Messaging Tactical Shore Systems Unified Capabilities Voice Solutions Secure Voice Solutions Multi Media





▼ Foreign Military Sales / Air Integration / U.S. Coast Guard Division

 Delivers and integrates tailored, C4I-releasable systems to foreign partners through Foreign Military Sales and Foreign Military Financing to enhance interoperability between the U.S. and international partners. Provides engineering integration and lifecycle support for Navy TacMobile along with C4I systems integration, installation and testing for new construction USCG ships.

▼ Surface Ship Integration Division

 Delivers integrated and interoperable C4I capabilities and support to new construction Navy aircraft carriers, amphibious ships, command ships and aircraft. Designs, integrates and tests interoperable C4I end-to-end capabilities to Navy and Coast Guard ships during new construction and modernization.

▼ Submarine Integration Division

 Delivers vital naval capabilities by connecting the entire undersea architecture of manned and unmanned systems and undersea vehicles to maximize joint warfighting capability.

▼ Shore C4I Integration Division

 Delivers integrated and interoperable C4I capabilities and support to the Navy's shore and expeditionary forces through modernization, acquisition and system integration.



FMS/Air Integration/USCG Division (PMW 740) Overview

▼ What We Do

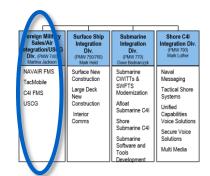
 Delivers engineering, integration and lifecycle support of C4I systems for naval aviation platforms, Foreign Military Sales and USCG ships.

▼ Major Systems

- TacMobile Tactical Operations Center (TOC) / Mobile Tactical Operations Center (MTOC)
- Broad Area Maritime Surveillance Demonstrator (BAMS-D)
 Tactical Auxiliary Ground Station
- C4I Systems Foreign Military Sales (FMS)
- United States Coast Guard ship new construction and modernization

▼ Primary Customers

- PEO C4I PMW 740/750/760
- NAVAIR PMA 290
- USCG C5ISC and CG-9
- NAVSEA & PEOs



Division Head: Martina Jackson FY20 TOA: \$331,684,976





Surface Ship Integration Division (PMW 750/760) Overview

▼ What We Do

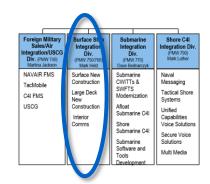
 Provide the engineering necessary for integrating C4I systems into a shipboard applications aboard U.S. Navy, MSC, and USV.

▼ Major Systems

- C4I for Surface New Construction
- C4I for Large Deck New Construction
- Shipboard Interior Communications
- Cooperative Engagement Capability (CEC)
- Enterprise VTC

▼ Primary Customers

- PEO C4I PMW 750
- PEO C4I PMW 760
- NAVSEA & PEOs
- IWS 6.0
- Military Sealift Command
- Various USN Commands



Division Head: Mark Held FY20 TOA: \$84,600,217.



Executes the advanced planning, engineering, integration and installation of C4I equipment on new-construction ships.



Surface Ship Integration Division (PMW 750/760) **Future Opportunities & Needs**

▼ Future Opportunities/Growth

- Interior Communications (IC) IPT
 - IC IPT provides Mission Critical communications Mission Assurance Category (MAC) 1 to the Navy.
 - Wireless technology for interior communications
 - IVCS Services contract
 - FFG(X), Wired and Wireless Comms Class system solutions

Future Ships Project Support Follow-On Contract

Description - JCIDS acquisition documentation development and support and applies MBSE best practices using a systems engineering approach. The impact of this business line continues to increase efficiencies between applicable NIWC Atlantic and NIWC Pacific commands and other stakeholders, including applicable S&T and R&D communities, to significantly improve the acquisition documentation for the warfighter.

▼ Where Industry can Help

- Technologies to enable transition to a virtual engr. / integration environment
- Migration of workforce digital production
- Introduction to innovative testing strategy and tools
- Use of wireless technology in secure spaces
- Wearable, Secure Video Voice and Telephony
- Next Gen-Turnkey
- Standardization of Platform Interfaces
- Cyber Security Engineering
- Information Assurance



Submarine Integration Division (PMW 770) Overview

▼ What We Do

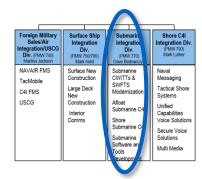
 Delivers C5I capabilities and support to the Navy's submarine and associated ashore communications infrastructure during new construction and modernization.

▼ Major Systems

- Common Submarine Radio Room (CSRR)
- Submarine Operational Authority (SUBOPAUTH)
- Fleet Submarine Broadcast System (FSBS)
- Submarine Warfare Federated Tactical System (SWFTS)
 - Sonar, Combat Control, Imaging, Electronic Warfare, and Radar
- C5I System and Weapons Shipping, Handling, Launching Systems Integrated Test Team (CWITT)
 - Non Propulsion Electronic Systems (NPES)
 - Weapons, Shipping, Handling and Launchers

▼ Primary Customers

- NAVSEA & PEO SUB
- PEO C4I PMW 770
- Fleet Type Commanders



Division Head: Dave Bednarczyk FY20 TOA: \$110,285,674









Support includes antenna to weapon system integration, engineering, fielding, test, logistics, sustainment and Fleet support.



Submarine Integration Division (PMW 770) **Future Opportunities & Needs**

▼ Future Opportunities/Growth

- Nuclear Command, Control and Communications-Naval (NC3-N)
 - Information handling, storage and distribution
 - Defense Industrial Base adherence and compliance with future policy
- Platform integration of SWFTS and C4I
 - System Engineering and Integration (SE&I)
 - Schedule Integration during Modernization for NPES (C5I)
- Columbia Class and SSN-X
 - Test and Evaluation, Logistics, Configuration Management, Information Security, Cyber Security, MBSE, etc.
- Submarine Software and Tools Development
 - Application development for Submarine Test Programs (Interactive Test Program – IPT)
 - Application development for Submarine Modernization Efforts (SM3)
 - Software development for Submarine Shore Based NC3 Communications

▼ Where Industry can Help

- Match and deliver the Navy's demand for new technologies and equipment.
- Ensure the growth and health of technical knowledge and skills.
- Improve planning and communication. Keep lines of communication open, deliver on time.



Upcoming Contract Development Efforts

- ▼ Submarine C5I, NC3 and SUBOPAUTH Test and Evaluation Engineering Support
- ▼ CWITT/ SWFTS Modernization
 - Provide engineering, technical, logistics, and program support services to perform systems integration and T&E of new construction Submarine C5I and Weapons launcher systems, Modernization of SWFTS systems on all classes of submarines, and Submarine Operating Authority Communications including NC3 systems.
 - Acquisition Strategy: Sole Source Niche (Follow-on to SEAPORT N65236-17-F-3083)
 - Solicitation: N65236-20-TBD RFP Estimated Q1 FY22
 - Contract award planned for Q4 FY22
 - Classification: TS/SCI
 - Location of performance:
 - Contractor facilities
 - Government facilities, Public and Private Shipyards in the following states/countries:
 - Virginia, Connecticut, Maine, Georgia, California, Washington, Washington DC, Hawaii,
 Guam, South Carolina, North Dakota and various OCONUS locations



Upcoming Contract Development Efforts

- ▼ Submarine Software and Tools development
 - Provide services to develop software products and tools, such as Interactive Test Procedure application, used for Test and Evaluation of C5I systems, primarily focused on submarines and related naval platforms. Also provide services for software required for the Submarine Operating Authority such as IDNS.
 - Acquisition Strategy: Seaport NxGen open competition
 - Solicitation: N65236-20-TBD RFP Estimated early Q1 FY22
 - RFI Feb 2021 N65236-SNOTE-094B34A0
 - Contract award planned for Q3 FY22
 - Classification: TS/SCI
 - Location of performance:
 - Contractor facilities
 - Government facilities in the following states/countries:
 - Virginia



FSBS VLF/LF Engineering Services

- ▼ Fixed Submarine Broadcast System (FSBS) Fixed Very Low Frequency/Low Frequency (FVLF/LF) Systems Engineering Services.
 - Solicitation Number: N65236-20-R-0024
 - Projected solicitation RFP: TBD
 - Scope of Work
 - Provide key engineering and integration services to theFixed Submarine Broadcast System (FSBS) by conducting analysis and implementing solutions for FSBS Fixed Very Low Frequency/Low Frequency (FVLF/LF) Naval Shore Antenna Transmitter sites for technical, logistical, and life cycle support.
 - Location of performance:
 - South Carolina, Maine, N. Dakota, Washington (State), Hawaii, California, and various OCONUS locations across the globe.



Shore Submarine C4I Technical Support

- ▼ Shore Submarine Communications Systems (SSCS) Command, Control, Communications, Computers, & Intelligence (C4I) Technical Support
 - Solicitation Number: N65236-20-R-3026
 - Projected solicitation RFP: TBD
 - Scope of Work
 - Provide key engineering and integration services to SSCS by conducting analysis and implementing solutions for SSCS BCA, BKS, BTS, and TACAMO sites for technical, logistical, and life cycle support.
 - Location of performance:
 - Contractor's Facility
 - Government Facilities in the following states/countries:
 - California, Virginia, Hawaii, Japan, Italy, Oklahoma, California, Maryland, Georgia, and Washington



Shore C4I Integration Division (PMW 790) Overview

▼ What We Do

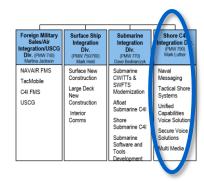
 Designs, integrates, tests and delivers interoperable C4I infrastructure to support naval afloat, sub-surface, air platforms and shore network communications.

▼ Major Systems

- Shore Tactical Assured Command and Control (STACC)
- United States Naval Observatory (USNO) Precise Timing and Astrometry (PTA) Networks
- Naval Modular Automated Communications System II (NAVMACS II)
- Command and Control Office Information Exchange (C2OIX)
- Unified Capabilities Voice Solutions
- VINSON ANDVT Crypto Modernization (VACM)
- Automated Digital Network System (ADNS) Voice
- Defense Red Switch Network (DRSN)

▼ Primary Customers

- PEO C4I PMW 790
- NAVIFOR & other PEOs



Division Head: Mark Luther FY20 TOA: \$94,191,650



Support includes integration of voice, video and data across shore infrastructure supporting deployed warfighters.



Fleet Installations and Response Division Overview

▼ What We Do

Provide direct Fleet support after new platform delivery through the Fleet Support Office (FSO), Fleet modernization through the Installation Execution Office, and Fleet sustainment of system performance through the In-Service Engineering Agent (ISEA). Provide support to NAVSUP's Performance Based Logistics (PBL) through its PBL Office (PBL-O) by refurbishing, repairing and reengineering selected components, equipment and sub-systems for critical items no longer serviced by Other Equipment Manufacturers (OEM) providers.

▼ Major Systems

- C4I Surface Modernization
- C4I Shore Modernization
- C4I Sub Modernization
- Fleet Support Services

- Installation Management Office
- Digitally Integrated Testing ITP SOVTs
- Fleet Support Office
- PBLO / DEPOT

▼ Primary Customers

- FRD 100NAVSEA & PEOs
- FRD 200
 NAVSUP

Fleet Installations and Response Division Len Little			
Fleet Support Office (FSO)	Surface Modernization Unit Level		
Performance Based Logistics Office (PBLO)	Surface Modernization Force Level		
Depot	Submarine Modernization C4I		
	Shore Modernization		

Division Head: Len Little FY20 TOA: \$336,339,300





Questions?